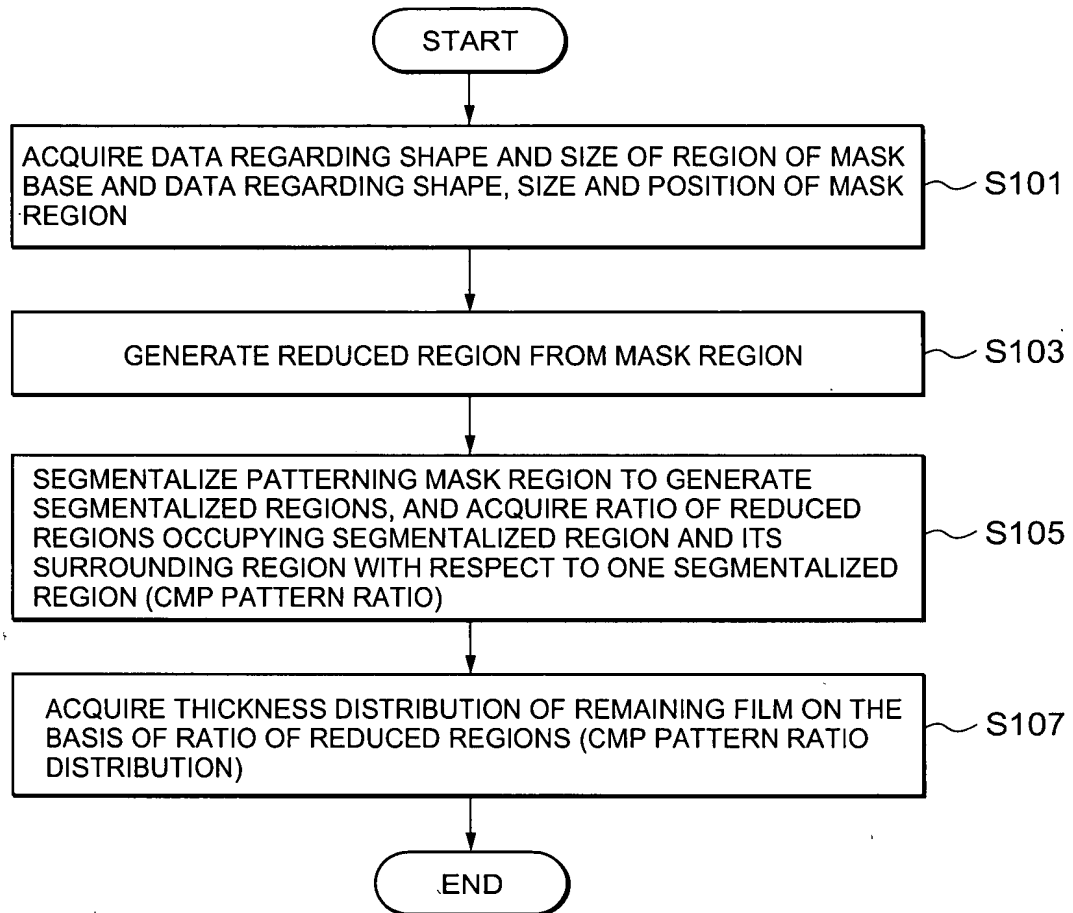


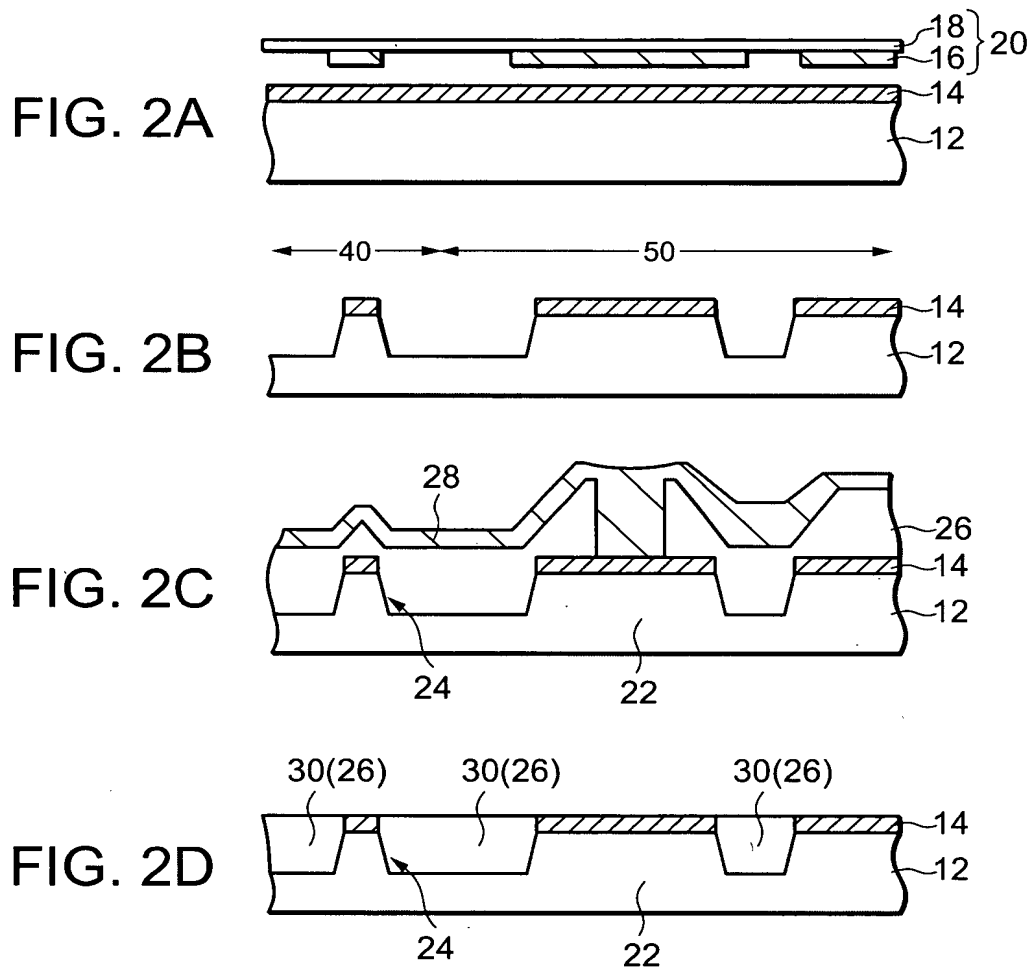
1/16

FIG. 1



FLOWCHART ILLUSTRATING FIRST METHOD FOR ESTIMATING REMAINING FILM THICKNESS

2/16



DIAGRAMS ILLUSTRATING FIRST METHOD FOR ESTIMATING
REMAINING FILM THICKNESS

3/16

FIG. 3

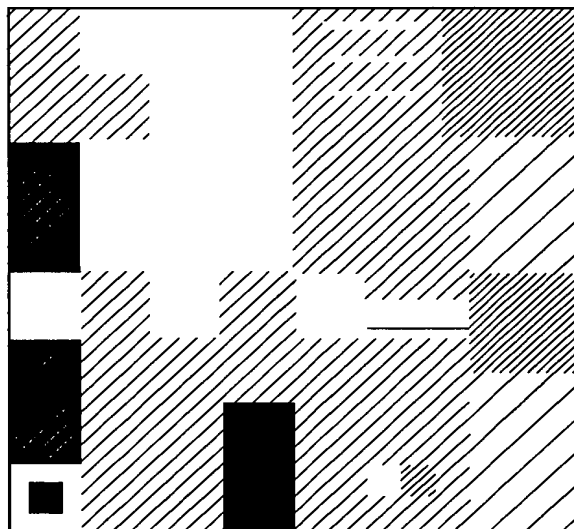


DIAGRAM ILLUSTRATING FIRST METHOD FOR
ESTIMATING REMAINING FILM THICKNESS

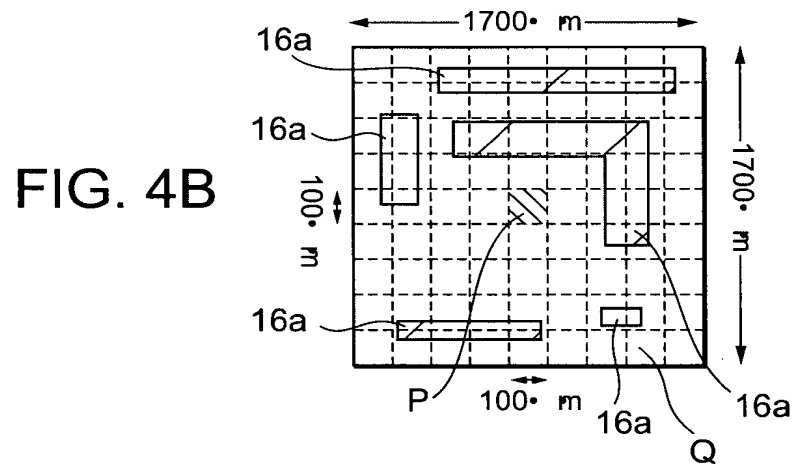
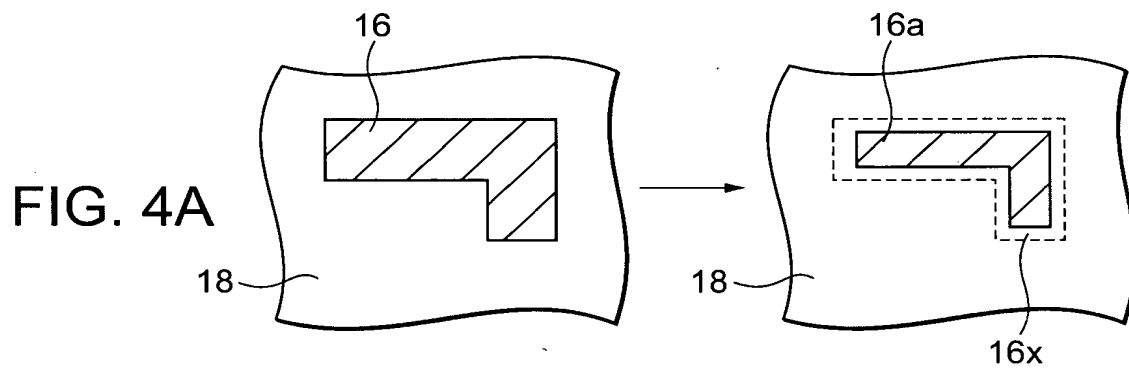
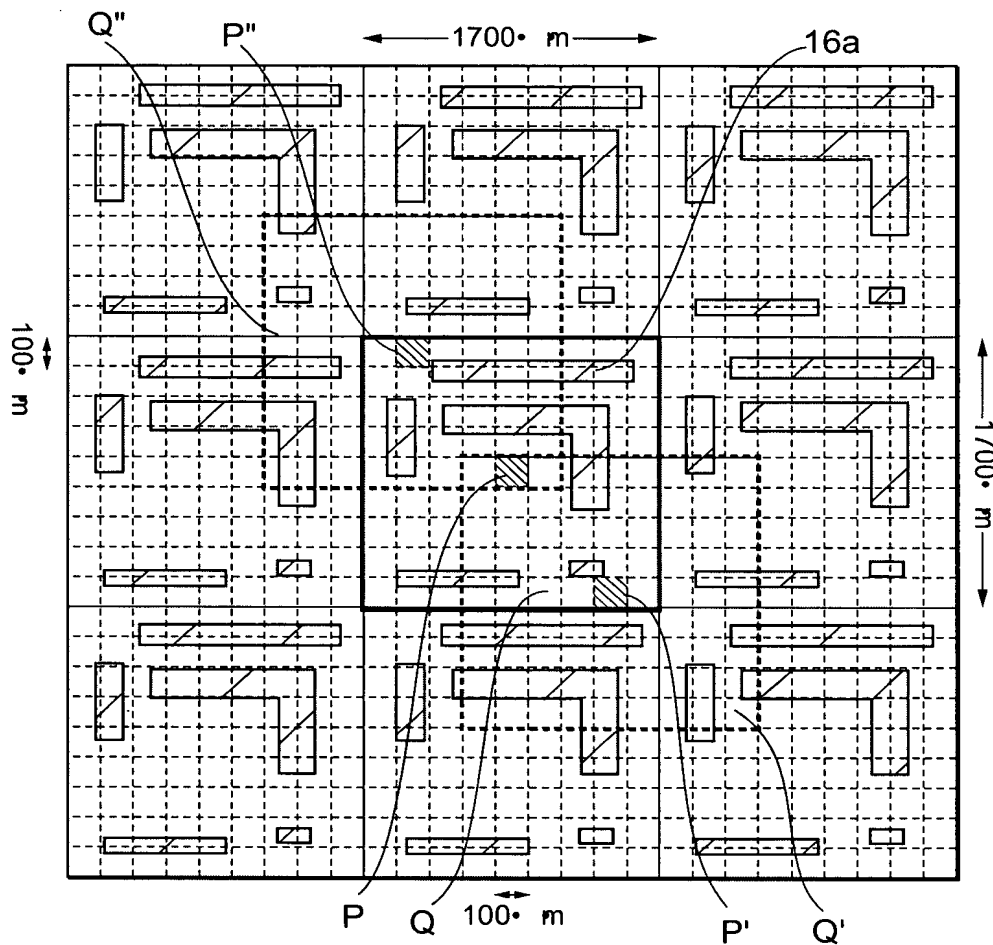


DIAGRAM ILLUSTRATING FIRST METHOD FOR
ESTIMATING REMAINING FILM THICKNESS

5/16

FIG. 5

DIAGRAM ILLUSTRATING FIRST METHOD FOR
ESTIMATING REMAINING FILM THICKNESS

6/16

FIG. 6

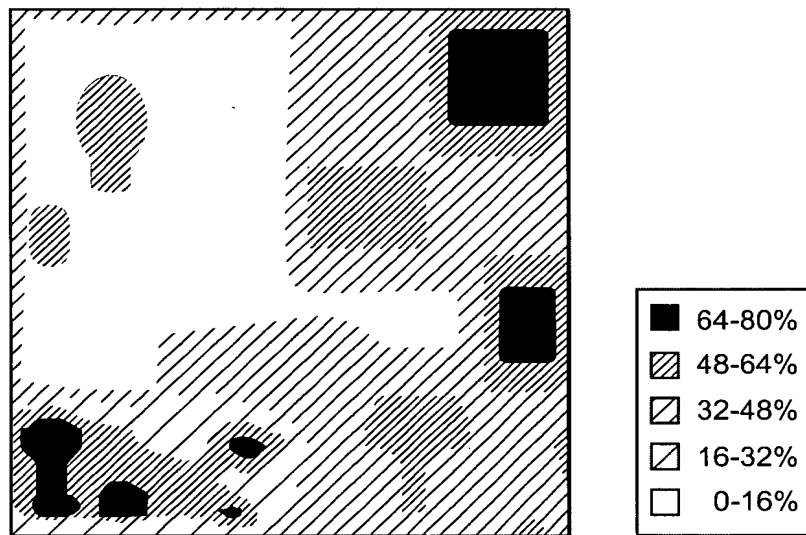
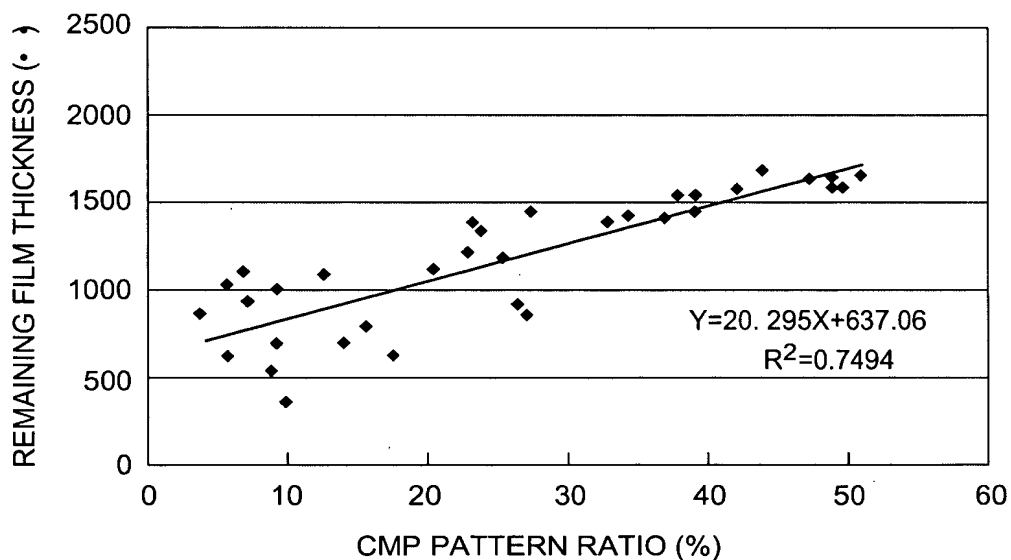


ILLUSTRATION OF FIRST METHOD FOR ESTIMATING REMAINING FILM THICKNESS (CMP PATTERN RATIO DISTRIBUTION)

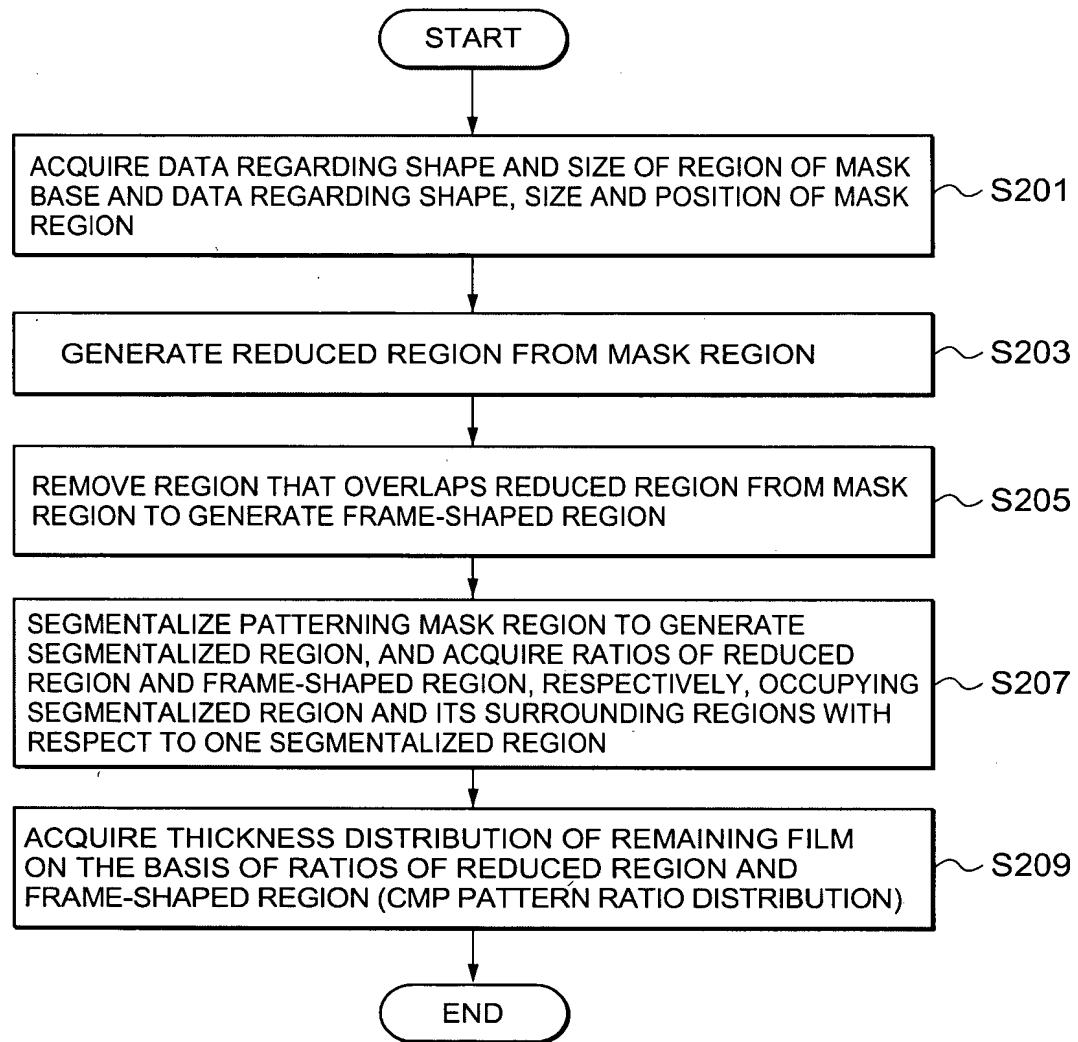
FIG. 7



EVALUATION OF VALIDITY OF FIRST METHOD FOR ESTIMATING REMAINING FILM THICKNESS

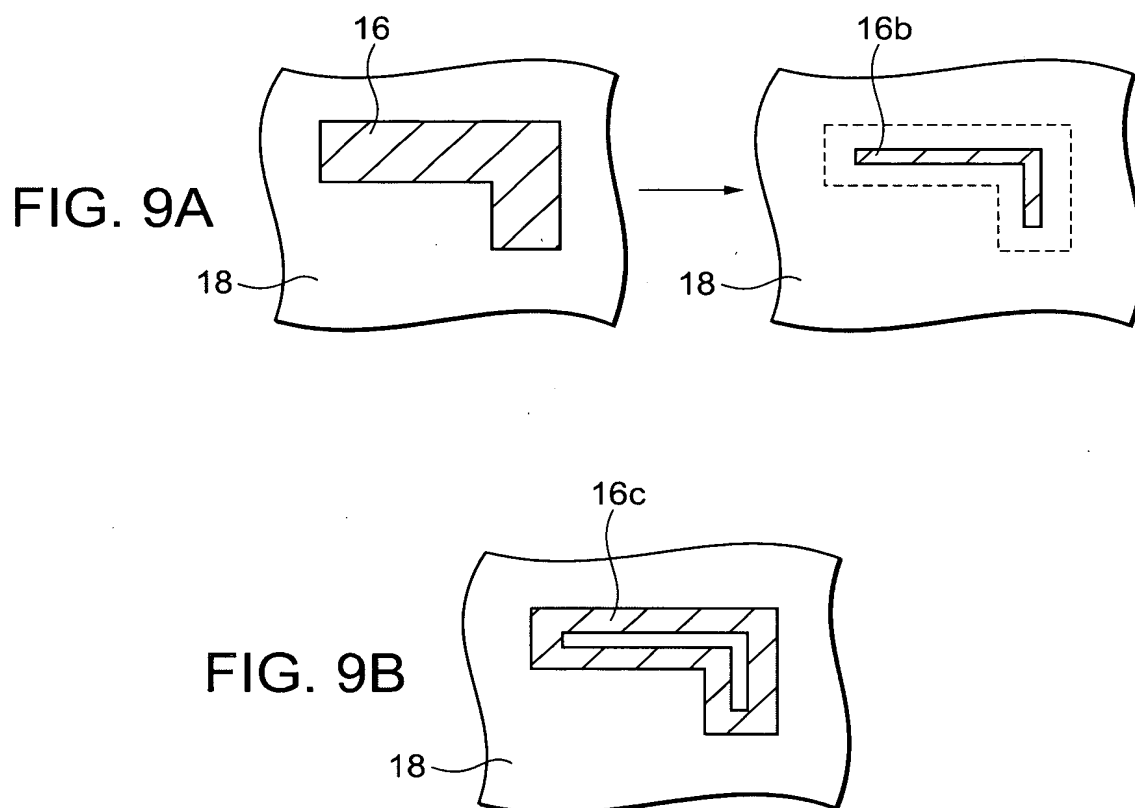
7/16

FIG. 8



FLOWCHART ILLUSTRATING SECOND METHOD FOR ESTIMATING
REMAINING FILM THICKNESS

FIG. 9



DIAGRAMS ILLUSTRATING SECOND METHOD FOR
ESTIMATING REMAINING FILM THICKNESS

9/16

FIG. 10A

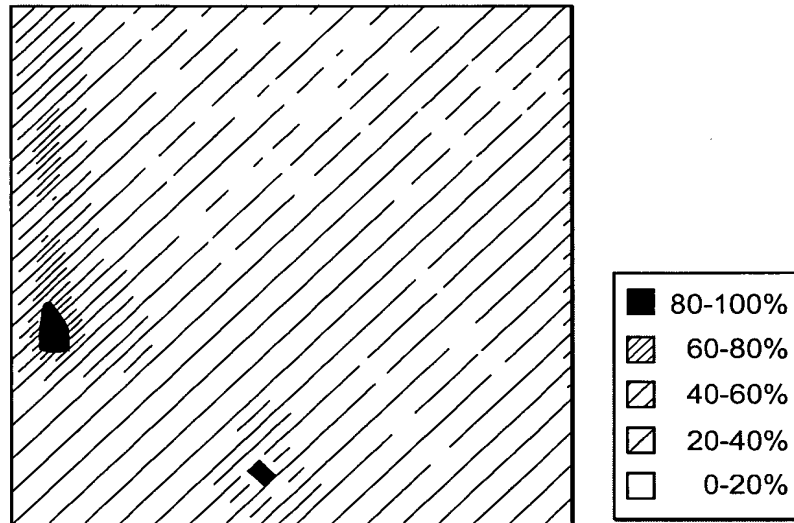
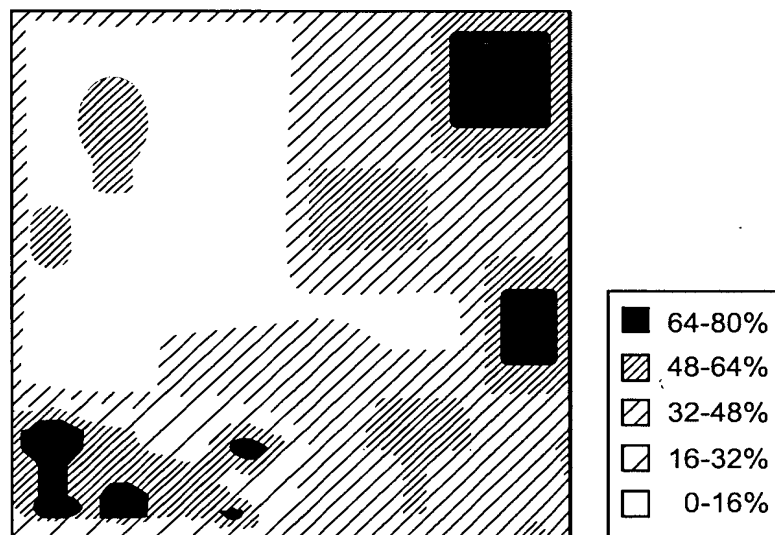


FIG. 10B



DIAGRAMS ILLUSTRATING SECOND METHOD FOR
ESTIMATING REMAINING FILM THICKNESS

10/16

FIG. 11

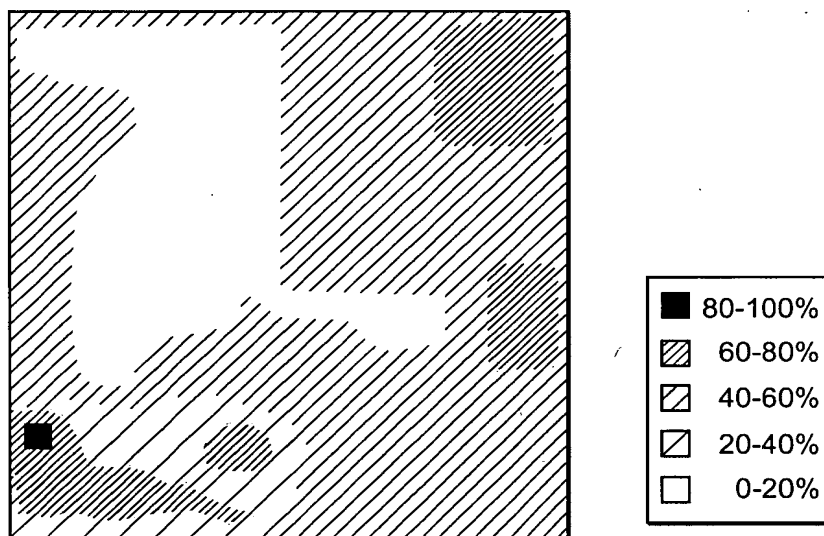
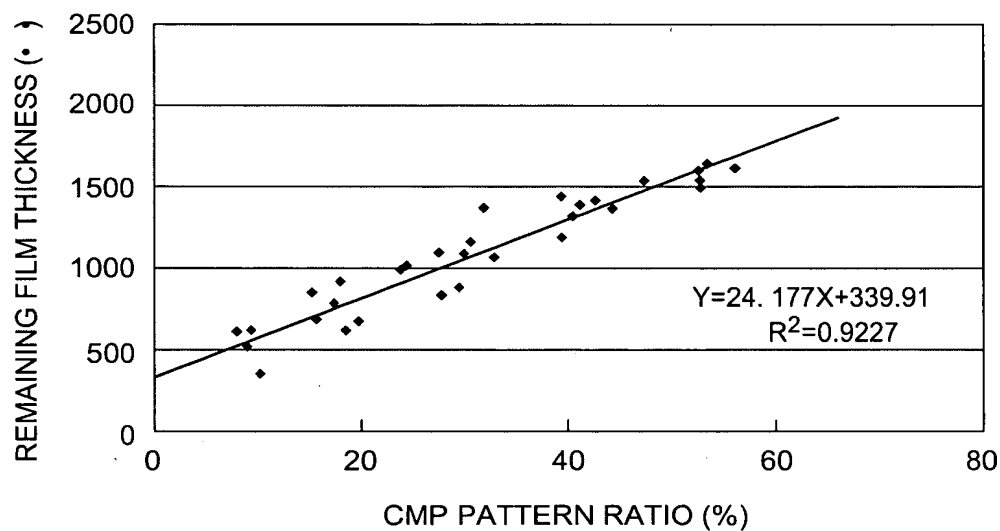


ILLUSTRATION OF SECOND METHOD FOR ESTIMATING
REMAINING FILM THICKNESS (CMP PATTERN RATIO
DISTRIBUTION)

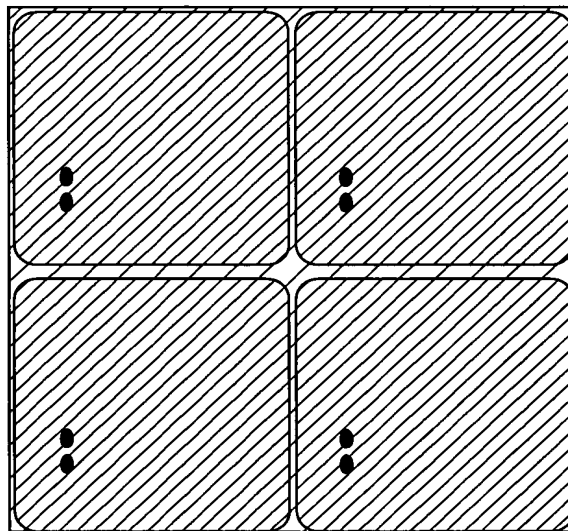
FIG. 12



EVALUATION OF VALIDITY OF SECOND METHOD FOR
ESTIMATING REMAINING FILM THICKNESS

11/16

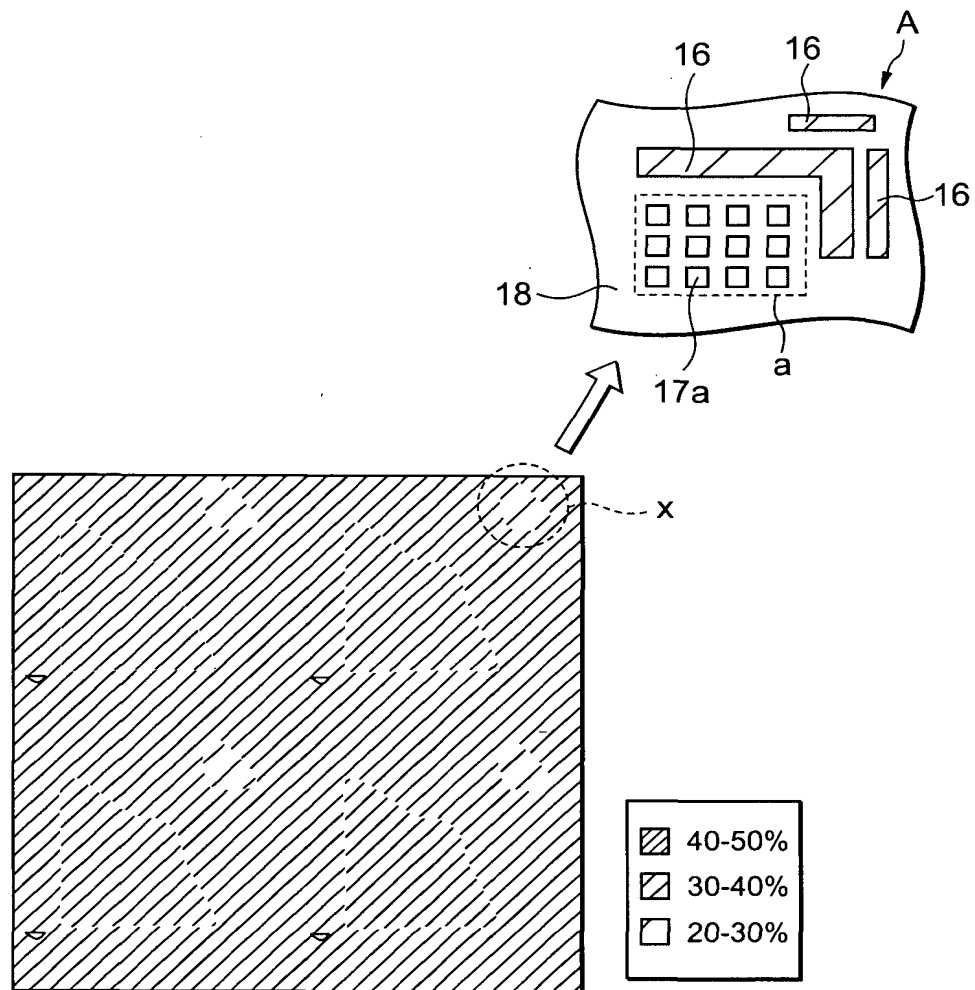
FIG. 13



FIRST PATTERNING MASK DESIGN METHOD

12/16

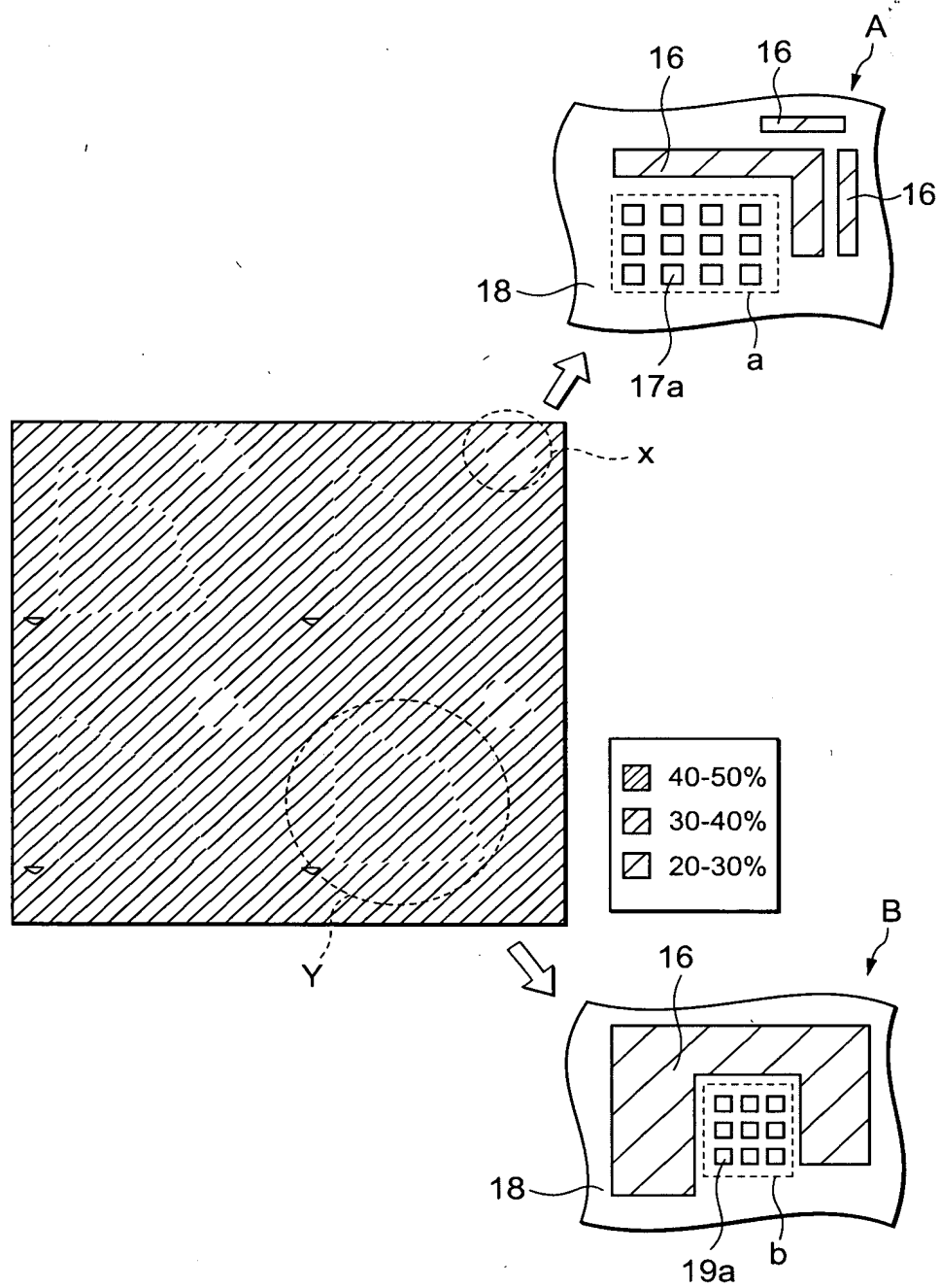
FIG. 14



FIRST PATTERNING MASK DESIGN METHOD

13/16

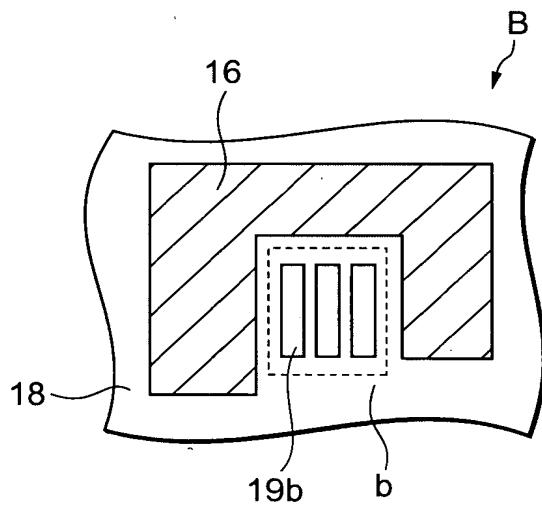
FIG. 15



SECOND PATTERNING MASK DESIGN METHOD

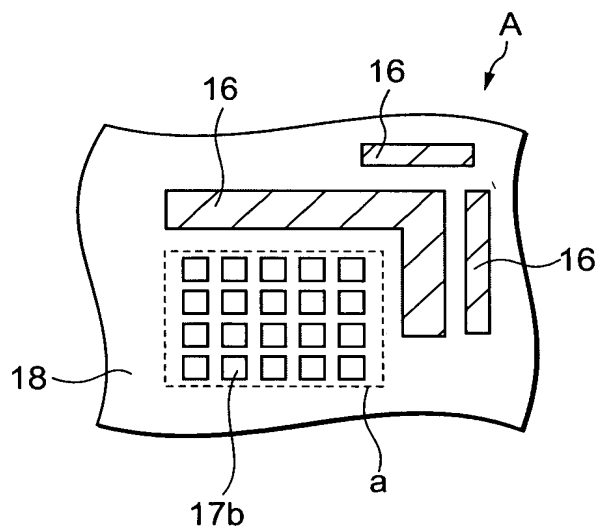
14/16

FIG. 16



THIRD PATTERNING MASK DESIGN METHOD

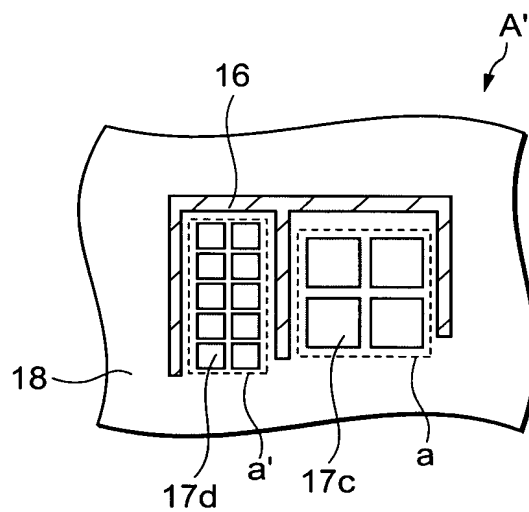
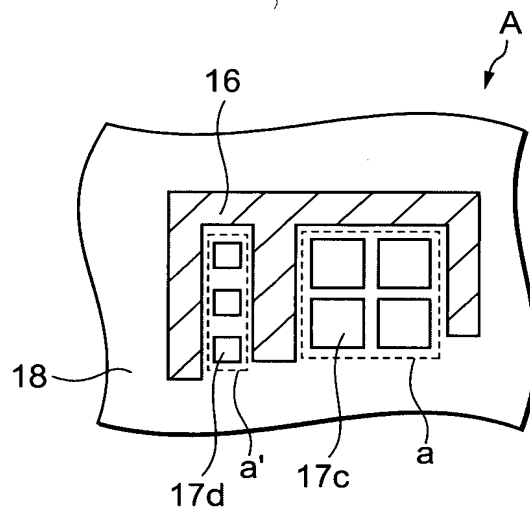
FIG. 17



FOURTH PATTERNING MASK DESIGN METHOD

16/16

FIG. 20



SEVENTH PATTERNING MASK DESIGN METHOD